

## Title (en)

SYSTEMS AND METHODS FOR DISCERNING EYE SIGNALS AND CONTINUOUS BIOMETRIC IDENTIFICATION

## Title (de)

SYSTEME UND VERFAHREN ZUR UNTERSCHIEDUNG VON AUGENSIGNALEN UND ZUR KONTINUIERLICHEN BIOMETRISCHEN IDENTIFIZIERUNG

## Title (fr)

SYSTÈMES ET PROCÉDÉS DE DISCERNEMENT DE SIGNAUX OCULAIRES ET D'IDENTIFICATION BIOMÉTRIQUE CONTINUE

## Publication

**EP 3140780 A4 20180411 (EN)**

## Application

**EP 15827954 A 20150509**

## Priority

- US 201461991435 P 20140509
- US 201462023940 P 20140713
- US 201462027774 P 20140722
- US 201462027777 P 20140722
- US 201462038984 P 20140819
- US 201462039001 P 20140819
- US 201462046072 P 20140904
- US 201462074920 P 20141104
- US 201462074927 P 20141104
- US 2015030052 W 20150509

## Abstract (en)

[origin: US2015324568A1] Apparatus, systems, and methods are provided for secure mobile communications (SMC) by an individual using biometric signals and identification in real time. The apparatus includes a wearable computing device where identification of the user is based on iris recognition, and/or other physiological and anatomical measures. Biometric identity measures can be combined with other security-based information such as passwords, date/time stamps, and device identification. Identity verification can be embedded within information that is transmitted from the device and/or to determine appropriate security measures. SMC addresses security issues associated with the transmission of eye-signal control and biometric identification data using secure interfaces with network devices within a system of systems (SoS) software architecture.

## IPC 8 full level

**G06F 3/01** (2006.01); **G06F 3/03** (2006.01); **G06F 21/32** (2013.01); **G06K 9/00** (2006.01); **H04L 29/06** (2006.01); **H04W 12/06** (2009.01)

## CPC (source: CN EP KR US)

**G02B 27/0093** (2013.01 - KR US); **G02B 27/017** (2013.01 - KR US); **G02B 27/0172** (2013.01 - US); **G06F 3/012** (2013.01 - KR US); **G06F 3/013** (2013.01 - CN EP KR US); **G06F 3/017** (2013.01 - CN EP KR US); **G06F 3/0304** (2013.01 - CN EP KR US); **G06F 3/04817** (2013.01 - US); **G06F 3/0482** (2013.01 - KR US); **G06F 21/316** (2013.01 - EP US); **G06F 21/32** (2013.01 - CN EP KR US); **G06F 21/64** (2013.01 - EP US); **G06T 19/006** (2013.01 - KR US); **G06V 40/18** (2022.01 - KR); **G06V 40/19** (2022.01 - US); **G06V 40/193** (2022.01 - US); **G06V 40/197** (2022.01 - US); **H04L 63/0861** (2013.01 - CN EP KR US); **H04N 5/44504** (2013.01 - US); **H04N 23/80** (2023.01 - US); **H04N 23/90** (2023.01 - US); **H04W 12/06** (2013.01 - CN); **H04W 12/065** (2021.01 - EP US); **H04W 12/33** (2021.01 - EP); **G02B 2027/0138** (2013.01 - US); **G02B 2027/014** (2013.01 - US); **G02B 2027/0178** (2013.01 - US); **G06F 2203/011** (2013.01 - CN EP US)

## Citation (search report)

- [IY] WO 2005094667 A2 20051013 - TORCH WILLIAM C [US]
- [A] US 8223024 B1 20120717 - PETROU DAVID [US]
- [Y] US 2012275664 A1 20121101 - BERGEN JAMES RUSSELL [US]
- [Y] US 5291560 A 19940301 - DAUGMAN JOHN G [GB]
- [A] US 2014130148 A1 20140508 - SAKO YOICHIRO [JP], et al
- [A] JP 2007006393 A 20070111 - RIKAGAKU KENKYUSHO
- See references of WO 2016018488A2

## Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

## DOCDB simple family (publication)

**US 2015324568 A1 20151112**; AU 2015255652 A1 20161124; AU 2015255652 B2 20180329; AU 2015297035 A1 20161124; AU 2015297035 B2 20180628; AU 2015297036 A1 20161124; AU 2015297036 B2 20170928; CN 106462743 A 20170222; CN 106537290 A 20170322; CN 106537290 B 20190827; CN 107087431 A 20170822; CN 107087431 A8 20171222; CN 107087431 B 20210205; EP 3140719 A2 20170315; EP 3140719 A4 20171227; EP 3140719 B1 20210707; EP 3140779 A1 20170315; EP 3140779 A4 20171129; EP 3140780 A2 20170315; EP 3140780 A4 20180411; EP 3140780 B1 20201104; JP 2017526078 A 20170907; JP 2017526079 A 20170907; JP 2017527036 A 20170914; JP 6550460 B2 20190724; KR 102173699 B1 20201103; KR 102230172 B1 20210319; KR 20170045149 A 20170426; KR 20170046108 A 20170428; KR 20170047195 A 20170504; KR 20200127267 A 20201110; US 10156900 B2 20181218; US 10620700 B2 20200414; US 2015326570 A1 20151112; US 2015338915 A1 20151126; US 2016062459 A1 20160303; US 2016085302 A1 20160324; US 2016274660 A1 20160922; US 2017235931 A1 20170817; US 9600069 B2 20170321; US 9823744 B2 20171121; WO 2015172124 A1 20151112; WO 2016018487 A2 20160204; WO 2016018487 A3 20160519; WO 2016018487 A8 20161208; WO 2016018487 A9 20160324; WO 2016018488 A2 20160204; WO 2016018488 A3 20160512; WO 2016018488 A9 20160324

## DOCDB simple family (application)

**US 201514708229 A 20150509**; AU 2015255652 A 20150509; AU 2015297035 A 20150509; AU 2015297036 A 20150509; CN 201580031094 A 20150509; CN 201580034682 A 20150509; CN 201580035714 A 20150509; EP 15789095 A 20150509; EP 15826370 A 20150509; EP 15827954 A 20150509; JP 2017511567 A 20150509; JP 2017511568 A 20150509; JP 2017511569 A 20150509; KR 20167034649 A 20150509; KR 20167034651 A 20150509; KR 20167034652 A 20150509; KR 20207030953 A 20150509; US 2015030047 W 20150509; US 2015030050 W 20150509; US 2015030052 W 20150509; US 201514708234 A 20150509;

US 201514708241 A 20150509; US 201514930617 A 20151102; US 201514937782 A 20151110; US 201615131273 A 20160418;  
US 201715418034 A 20170127